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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,046	06/24/2003	Fritz Hosel	32368-189830	8149
26694	7590	12/16/2005	EXAMINER	
VENABLE LLP P.O. BOX 34385 WASHINGTON, DC 20045-9998			VALENTIN, JUAN D	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/602,046

Applicant(s)

HOSEL ET AL.

Examiner

Juan D. Valentin II

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Amendment filed 09/30/2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 8-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>07/13/2005</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-4 & 8-27 have been considered but are moot in view of the new ground(s) of rejection necessitated by the amendments to independent claims 1, 14, & 27.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 & 5-12 rejected under 35 U.S.C. 102(b) as being fully anticipated by Shofner et al. (USPN '145, hereinafter Shofner).

### **Claims 1-3 & 5-12**

Shofner in conjunction with Figs. 8 & 9 discloses an apparatus on a textile fiber processing machine for inspecting and evaluating textile fiber material 134, the apparatus comprising an opto-electronic system for scanning the textile fiber material 134, there being relative movement between the opto-electronic device 130, 132, 136, & 138 and the fiber material 134 in a working direction and the fiber material 134 having a working width extending transversely to said working direction, the opto-electronic system comprising two or more partial camera modules 130 & 132 which are displaced from one another across the working width of

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the fiber material and which are in communication with a common image-evaluation device 144, each partial camera module consisting essentially of an objective in combination with a sensor, wherein further camera components are located remotely from said partial camera modules.

Applicant has argued that Shofner does not disclose partial camera modules “consisting essentially of” an objective in combination with a sensor. The term “consisting essentially of” does not mean “consisting of”, but merely means that the partial camera module “comprises” an objective in combination with a sensor among other things, therefore Shofner indeed does read on the newly added claim limitations in that Shofner teaches cameras “consisting essentially of” an objective and a sensor (Fig. 9, refs. 153, 154, & 184).

Shofner further discloses in which the opto-electronic system is stationarily arranged and, in use, the fiber material is moving along the working direction. Shofner discloses a camera module with a sensor (CCD) and further camera components 140 & 144 located remotely from said module. It is inherent that the camera module will comprise a power supply in order to power the camera. The imaging devices are connected to a common evaluation device 144, which satisfies the limitations of claim 8 in that “said further camera components comprises one or more components”, therefore Shofners silence as to the exact location of camera power supplies is not of importance since the limitations of claim 8 have been satisfied. Shofner further discloses in which there are two or more intermediate evaluating devices 140 & 142, each intermediate evaluation device 140 & 142 being in communication with a respective imaging device 130 & 132 and the intermediate evaluating devices being in communication with the common evaluation device 144. The device of Shofner is “suitable” for maintaining a

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continuously moving body of sliver. Shofner further discloses the entire width of the fiber material 134 can be monitored simultaneously 150 (col. 7, line 34-col. 8, line 62).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4 & 14-26 rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Shofner.

#### **Claim 4**

It is the position of the Office that even though the reference of Shofner does not specifically disclose the imaging devices are offset from one another in the working direction, it does outline the ability to using a plurality of cameras (col. 7, lines 33-48). In light of the applicants disclosure, there is no critically distinguishing camera offset feature in the applicants disclosure that exemplifies novelty over prior art disclosure. Applicant discusses on page 5, lines 24-25 in the originally filed disclosure that cameras can be arranged column-wise and side by side, but there is no further discussion as to how this camera arrangement actually improves over prior art disclosure or what problem this particular camera arrangement solves. As discussed above, Shofner discloses the use of a plurality of cameras, therefore producing the same results as the applicants limitation, therefore the reference of Shofner reads on applicants claimed limitation.

**Claims 14-26**

Shofner in conjunction with Figs. 6 & 8 discloses an apparatus on a spinning machine for inspecting and evaluating textile fiber material (col. 7, lines 1-30), having a width, comprising (Fig. 8) a **fixed** opto-electronic system 129 (emphasis added) is provided which scans the moving fiber material and converts the measured values into electronic signals, the system being communication with an image-evaluating device 144 which evaluates the raw data of the cameras 130 & 132, characterized that two or more cameras 130 & 132 are provided side by side across the width of the fibre material, wherein the cameras are located in an area limiting the distance between the cameras and the fibre material (col. 7, line 33-col. 8, line 62). It is the position of the Office that the cameras of Shofner indeed are placed in an area, which has limited distance between the cameras and the sample under test. Shofner teaches design constraints when designing and manufacturing the taught apparatus, the cameras cannot be located any where within the machine as evidenced by Shofner (col. 7, lines 1-31, esp. lines 9-15). Further, Shofner in conjunction with Figs. 3-6 shows that the location of the camera system can relocated to different locations through out the fibre material processing system. It is the position of the Office that it is obvious and well known to someone of ordinary skill in the art at the time of the claimed invention to place the claimed measuring apparatus in the entrance and/or exit of textile processing machines, for example, in order to make sure that the fiber length and nep number are at desired values, or insuring the exclusion of trash within the fibre material which is achieved by comparing camera measurement values to each other and those measurements stored in a desired memory, if the fiber length is to short, then adjusts to the working mechanisms within the machine are automatically made based on the compared values (col. 13, line 7-col. 17, lines 10).

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Official notice taken. Examiner takes Official notice of the fact that as a camera is moved closer to an object under test, i.e. zoomed in, then the field of view of the camera is decreased, meaning that less of the sample area can be monitored by the same camera because it's field of view has been limited by the camera movement closer to the fibre material under test. Applicant has claimed an apparatus comprising a **fixed** opto-electronic system, applicant has not provided any structure pertaining to the ability to provide camera movement closer or farther away from the material under test? The last limitation "and the number of cameras increases as the distance between the cameras and the textile fibre material decreases" adds no further limiting structure to the apparatus's as claimed, but merely states the need for more cameras if the camera system were to be moved closer to the fibre material under test. It would have been obvious to someone of ordinary skill in the art at the time of the claimed invention to add more cameras along the width of the fibre material in order to compensate for lost field of view if there was a need to move the camera system closer to the fiber material under test.

4. Claim 27 rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Shofner in view of Lubenow et al. (DE 196 24 905 A1, hereinafter Lubenow).

**Claim 27**

Shofner in conjunction with Figs. 6 & 8 discloses an apparatus for inspecting and evaluating textile fiber material (col. 7, lines 1-30), having a width, comprising (Fig. 8) moving opto-electronic sensors 129 (emphasis added) is provided which scans the moving fiber material and converts the measured values into electronic signals, the system being communication with an image-evaluating device 144 which evaluates the raw data of the opto-electronic sensors 130

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& 132, characterized that 3 or more opto-electronic sensors 130 & 132 are provided side by side across the width of the fibre material, wherein the opto-electronic sensors are located in an area limiting the distance between the cameras and the fibre material (col. 7, line 33-col. 8, line 62). It is the position of the Office that the cameras of Shofner indeed are placed in an area, which has limited distance between the cameras and the sample under test. Shofner teaches design constraints when designing and manufacturing the taught apparatus, the cameras cannot be located any where within the machine as evidenced by Shofner (col. 7, lines 1-31, esp. lines 9-15).

Shofner substantially teaches the claimed invention except that it fails to show 3 or more moving opto-electronic sensors. Lubenow shows that it is known to provide 3 or more moving opto-electronic sensors (Fig. 1, refs. 4-12) for a moving fibre quality control system. It would have been obvious to someone of ordinary skill in the art to combine the device of Shofner with the 3 or more moving opto-electronic sensors of Lubenow for the purposes of providing a complete image across the moving fabric (Lubenow abstract).

Official notice taken. Examiner takes Official notice of the fact that as a camera is moved closer to an object under test, i.e. zoomed in, then the field of view of the camera is decreased, meaning that less of the sample area can be monitored by the same camera because it's field of view has been limited by the camera movement closer to the fibre material under test. Applicant has claimed an apparatus comprising a moving opto-electronic system, applicant has not provided any information pertaining to the direction of movement or structure to provide the ability to move the opto-electronic sensors closer or farther away from the material under test? The last limitation "and the number of cameras increases as the distance between the cameras



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and the textile fibre material decreases” adds no further limiting structure to the apparatus’s as claimed, but merely states the need for more cameras if the camera system were to be moved closer to the fibre material under test. It would have been obvious to someone of ordinary skill in the art at the time of the claimed invention to add more cameras along the width of the fibre material in order to compensate for lost field of view if there was a need to move the camera system closer to the fiber material under test.

### *Conclusion*

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

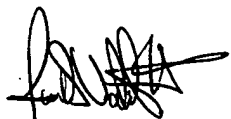
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan D. Valentin II whose telephone number is (571) 272-2433. The examiner can normally be reached on Mon.-Fri..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

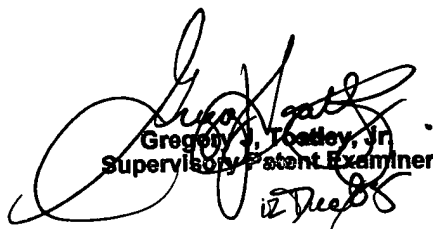


Juan D Valentin II

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JDV

December 11, 2005



Gregory J. Toatley, Jr.  
Supervisory Patent Examiner